National Phase of PCT Application No.: PCT/CH2003/000235 Amendment Dated: October 7, 2005

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A device to generate pulsed motions, comprising:
- (A) Two-two parallel shafts (3; 4), each of said parallel shafts having a longitudinal axis (5; 6), each having a rear end (7; 8), and each having a front end (9; 10);
- (B) a gear unit (2) comprising at least two gears (20; 21), at least one of said two at least two gears (20) being oval gears and each gear (20; 21) being connected to one of the rear ends (7; 8) of the two shafts (3; 4);
- (C) Two-two arcuate drive levers (30; 31), each of said arcuate drive levers having a first end (32; 33) and each having at least one second end (34; 35), where each first end (32; 33) of the drive levers (30; 31) are-is connected in rotatable manner with one respective front end (9; 10) of the two shafts (3; 4) about a first axis of rotation (11; 12); and
- (E) a drive body (40) connected to the second ends (34; 35) of the drive levers (30; 31) so as to be rotatable about two second axes of rotation (13; 14), eharacterized in that wherein
  - (F) The the drive body (40) is a polysomic body, i.e. an oloid,
  - (G) The the legs of each arcuate drive lever (30; 31) subtend a plane (36;

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- 37) and the second axes of rotation (13; 14) are situated in the planes (36; 37),
- (H) The two second axes of rotation (13; 14) are spaced a distance A(A) apart
- (I) at each drive lever (30; 31) the first axis of rotation (11; 12) and the second axis of rotation (13; 14) are separated by a gap (B)B, and
  - (J) wherein the distance (A) is equal to the gap (B)A = B.
- (Currently Amended) A-<u>The</u> device as claimed in claim 1, characterized in that-wherein the first axes of rotation (11; 12) are transverse to the planes (36; 37).
- 3. (Currently Amended) Device-The device as claimed in either of claims 1 and 2, characterized in that claim 1, wherein the second axes of rotation (13; 14) are mutually skewed.
- 4. (Currently Amended) Device-The device as claimed in one of claims 1 through 3, characterized in that it comprises claim 1, further comprising drive elements (1) to rotatively drive at least one gear (20; 21) in the gear unit (2).
- 5. (Currently Amended) Device-The device as claimed in one of claims 1 through 4, characterized in that claim 1, wherein the oval gears (20) exhibit a large semi-axis (a)a and a small semi-axis (b)b and in that wherein the shape of the oval is determined in that two mutually engaging gears (20) roll off one another at a constant axial separation in a positively, i.e. geometrically locking manner.

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6. (Currently Amended) Device The device as claimed in one of claims 1
through 5, characterized in that claim 1, wherein the distance between the axes of
two mutually engaging oval gears (20) is composed of the sum of the large semi-axis

(a)a and the small semi-axis (b)b of these the two oval gears (20).

7. (Currently Amended) Device-The device as claimed in one of claims 1

through 6, characterized at least claim 1, wherein one oval gear (20) exhibits a ratio

of its small semi-axis (b) to its large semi-axis a(a) of  $1/\sqrt{2}$ .

8. (Currently Amended) Device The device as claimed in one of claims 1

through 7, characterized in that claim 1, wherein at least one oval gear (20) exhibits

a ratio of its small semi-axis b-(b) to its large semi-axis a-(b) of 1/2.-

Claims 9-13 (Cancelled)